

C4ISR Transformation & Fusion Government & Industry Conference

20: NOV: 08

The Army's C4ISR Enterprise Approach to Expeditionary Warfare

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**AMERICA'S ARMY: THE STRENGTH OF THE NATION
ARMY STRONG**

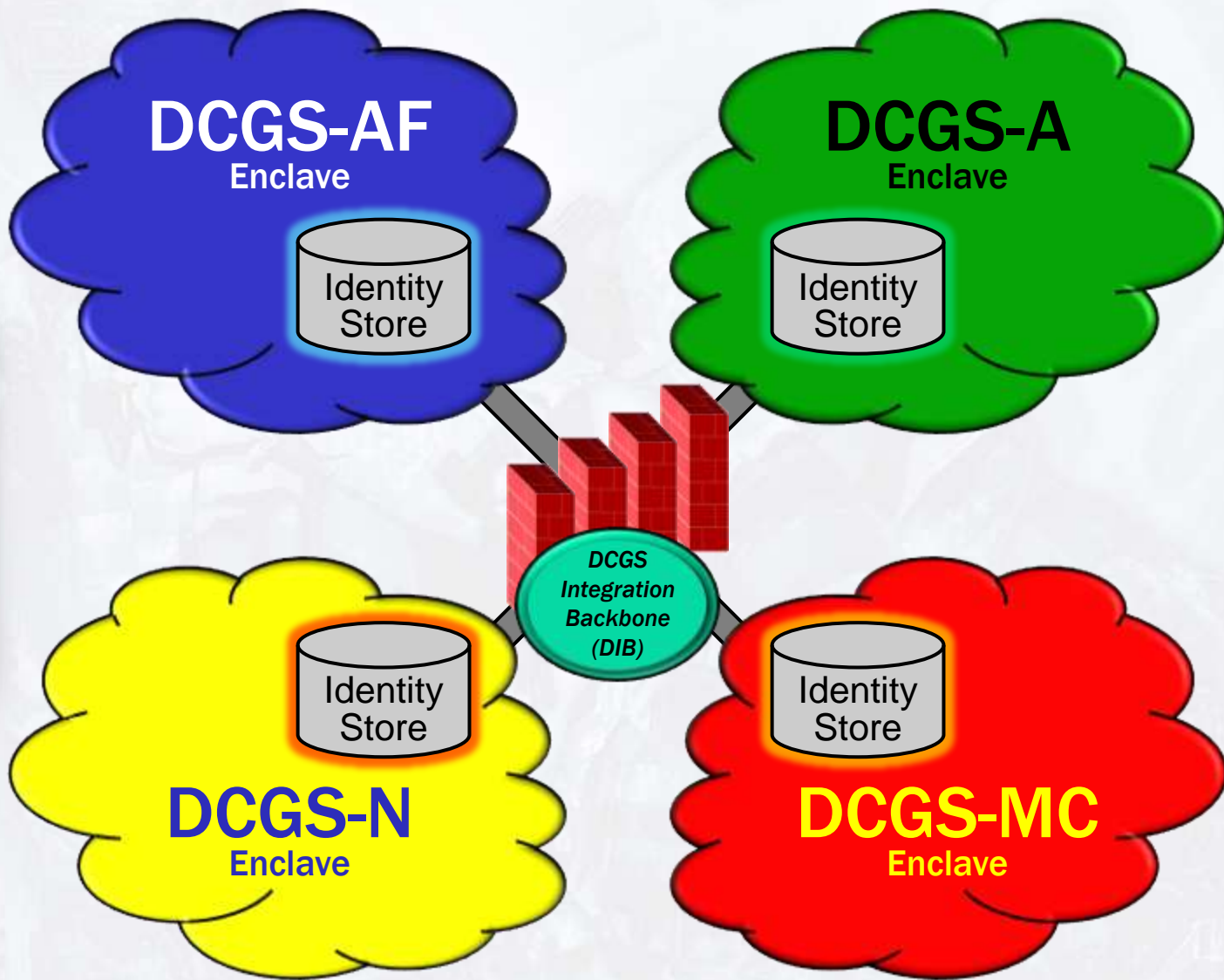




What's the Problem?



Can we actually
fix this?





What do we do?



- ★ Start by addressing transport problems
 - Federate and then converge IP Enclaves (e.g., MEDCOM, COE, AMC)
 - Augment teleports where they don't exist (Fixed Regional Hub Nodes)
- ★ Adopt and Implement a DoD/IC Enterprise Security ID Management Architecture
- ★ Move Data and Applications to the Net (Area Processing Centers)
- ★ Where there is a clear and compelling purpose, adopt Web 2.0 collaborative tools to revise business processes to deliver agile capabilities.





Intellipedia is an Enabler for Federal Collaborative Activities



INTERNET



HAPE
From Wikipedia, the free encyclopedia

 **This article needs additional citations for verification.**
Please help improve this article by adding reliable references. Unsourced material may be challenged and removed. (February 2008)

A HAPE (High Assurance Internet Protocol Encryptor) is a Type 1 encryption device that complies with the National Security Agency's HAPE IS (formerly the HAIPIS, the High Assurance Internet Protocol Interoperability Specification). The cryptography used is Suite A and Suite B, also specified by the NSA as part of the Cryptographic Modernization Program. HAPE IS is based on IPsec with additional restrictions and enhancements. One of these enhancements includes the ability to encrypt multicast data using a "preplaced key" (see definition in List of cryptographic key types). This requires loading the same key on all HAPE devices that will participate in the multicast session in advance of data transmission. A HAPE is typically a secure gateway that allows two enclaves to exchange data over an untrusted or lower-classification network.

Examples of HAPE devices include

- L-3 Communication's  HAPE @
 - KG-245X 100bps,
 - KG-245A fully-tactical 1 Gbit/s, and
 - KG-245A fully-ruggedized 100 Mbit/s
-  HAPE @

<http://en.wikipedia.org/wiki/HAPE>

FEDERAL GOVERNMENT



(U//FOUO) High Assurance Internet Protocol Encryptor
UNCLASSIFIED//FOUO
(Restricted from HAPE)

[Return to Cryptographic Modernization Interoperability Testing Program Page](#)

 **Cryptographic Modernization Initiative**

<https://www.intelink.gov/wiki/HAPE>

Both use:





Global Network Enterprise Construct (GNEC)

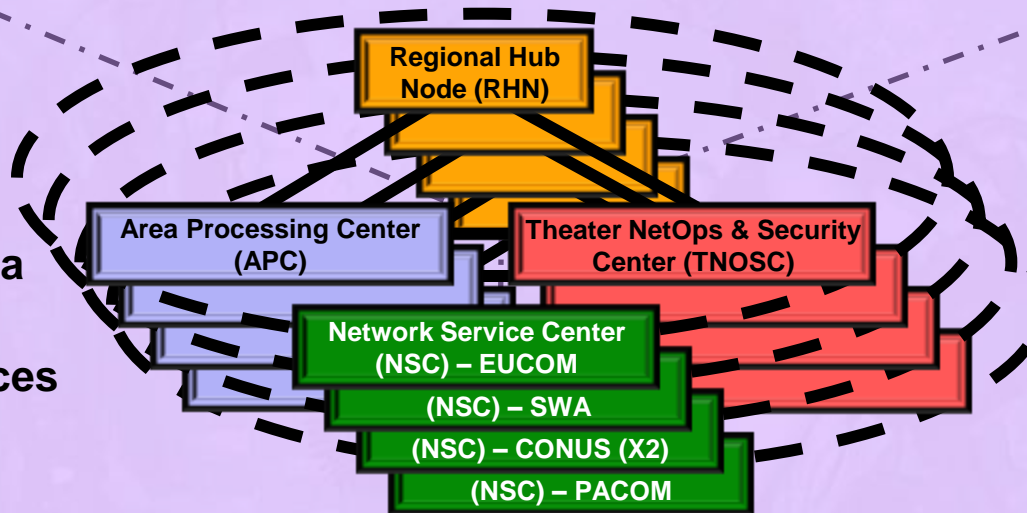


Connectivity

- GIG Integration
- Regional Networks
- Base Infrastructure
- SATCOM Connect/Management
- DISN Optimization
- Single DOIM

Services

- Data Strategy
- Authoritative Data
- Data Warehouse
- Virtualized Services
- Web Portals
- SOA
- Collaboration
- Integration of Joint Services
- Portfolio Management
- Green IT



NetOps

- Security Policy
- Service Level Agreements
- Global Identity Mgmt
- Single Logical Network/Federation
- Network Provisioning
- Network SA
- Content Delivery/Caching
- Spectrum Mgmt

Other

- Global/Theater Commands
- Joint Basing Communications
- Enterprise Governance
- Network Training



Global Network Enterprise Construct (GNEC)

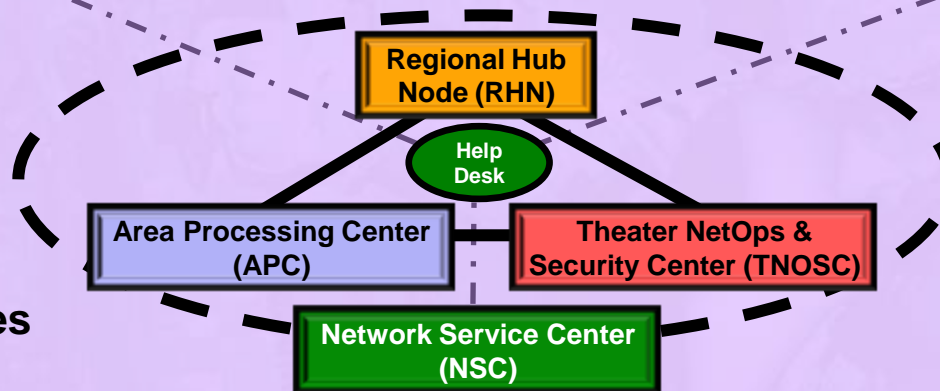


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NetOps

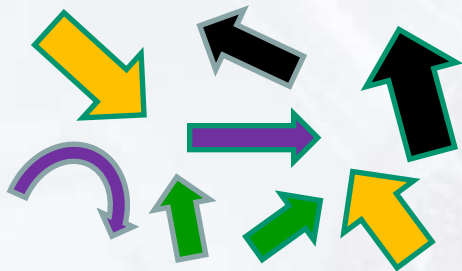
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NSC Concept of Operation

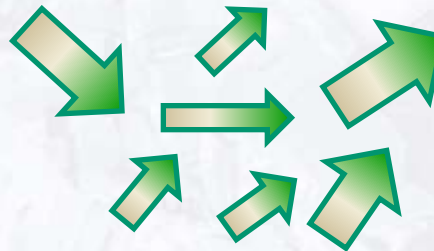


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Organizational

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Federated

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Enterprise

LandWarNet Now

- Fragmented
- Not Standardized
- Unsecure
- Expensive

Operating Principles

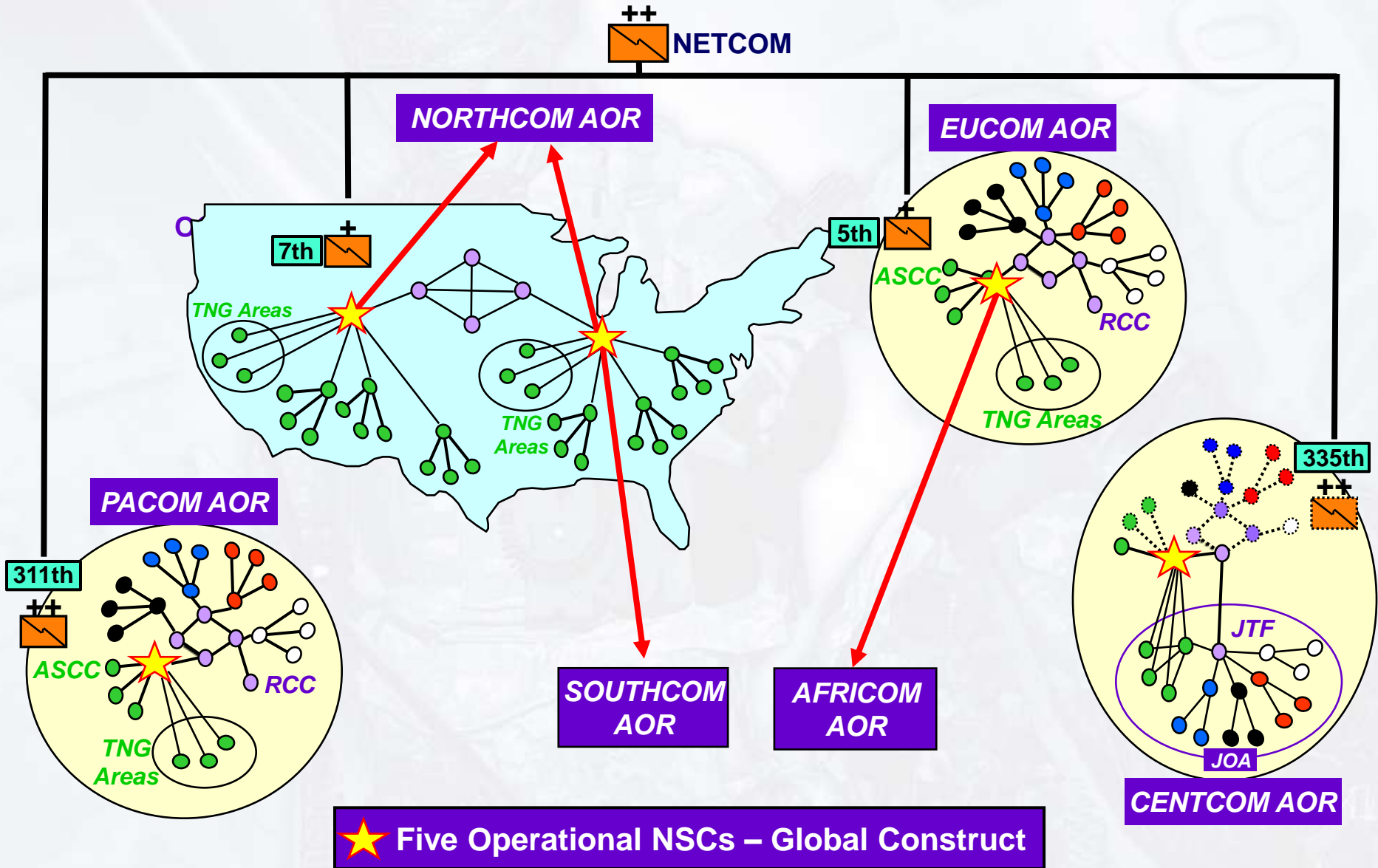


LandWarNet Future

- Global
- Standardized
- Protected
- Economical

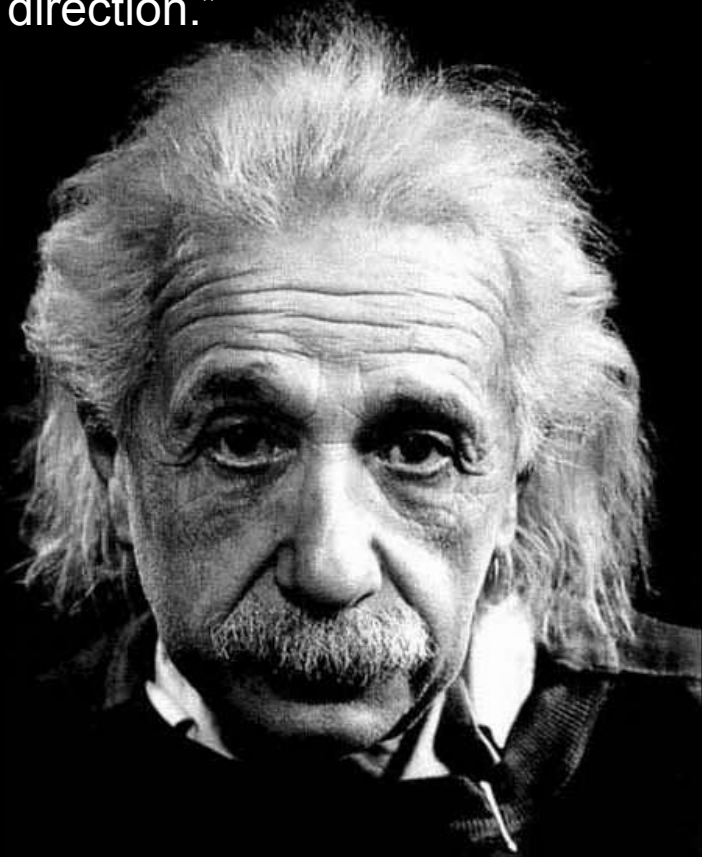


LANDWARNet NetOps / C2



★ **Five Operational NSCs – Global Construct**

“Any intelligent fool can make things bigger and more complex...It takes a touch of genius – and a lot of courage to move in the opposite direction.”



Key enablers for agile, collaborative, expeditionary warfare:

- End-to-end, seamless, joint IP network
- Enterprise ID Management Architecture
- Data and Applications on the Net
- Agile, effective NetOps / C2
- Where there is a clear and compelling purpose, adopt Web 2.0 collaborative tools to revise business processes to deliver agile capabilities.

Savage Chickens

by Doug Savage





Army Strong!